

Figure 1

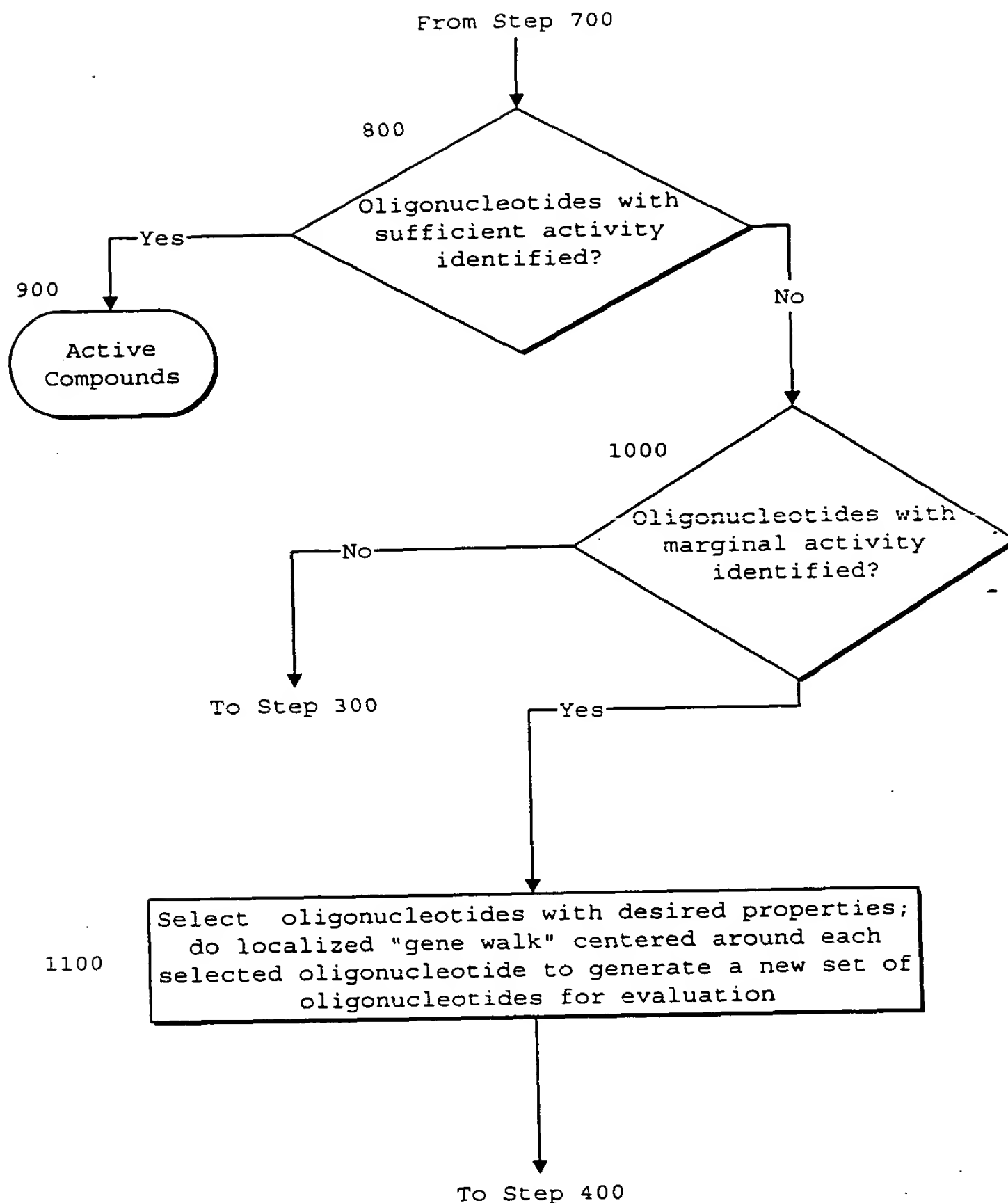


Figure 2

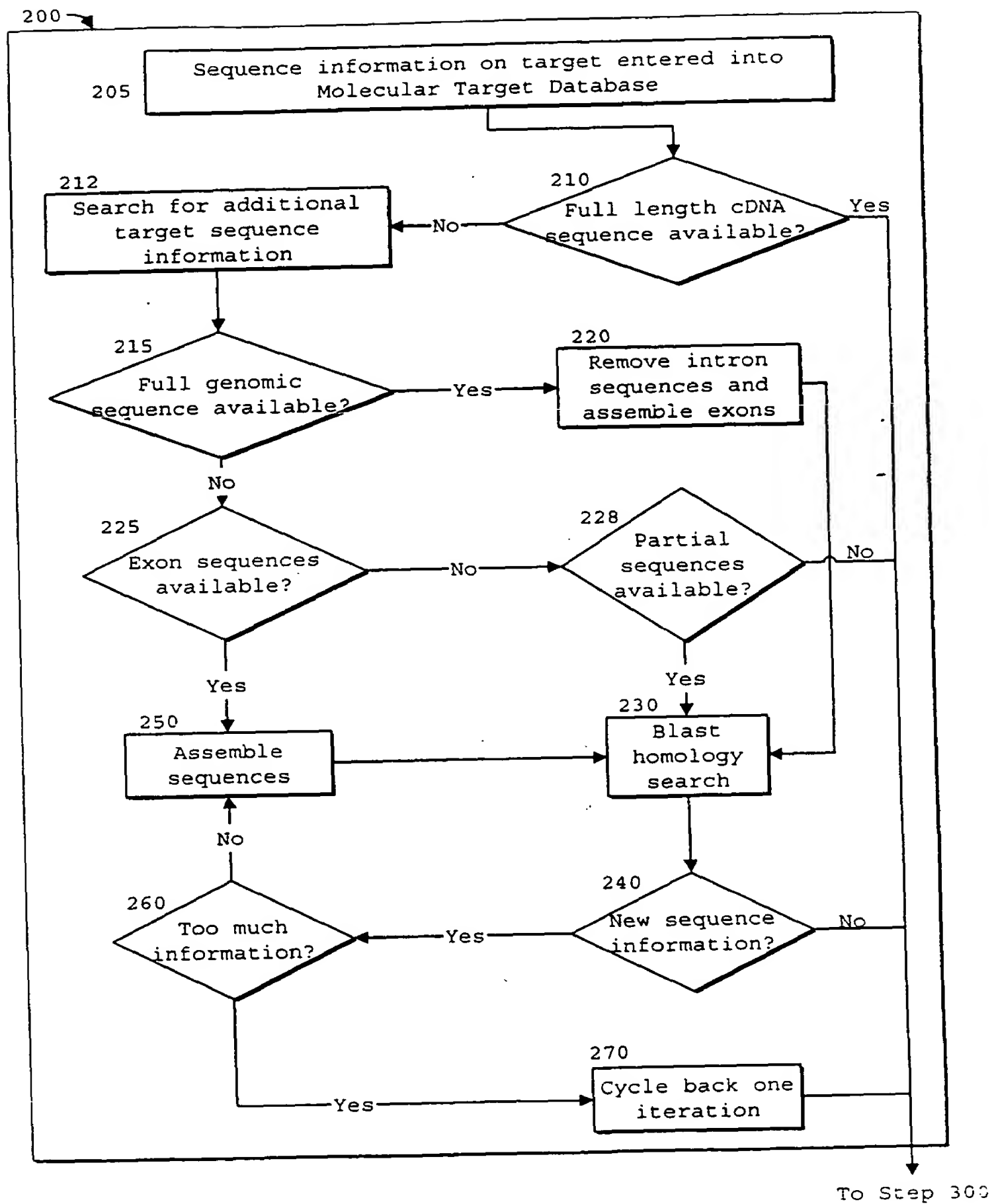


Figure 3

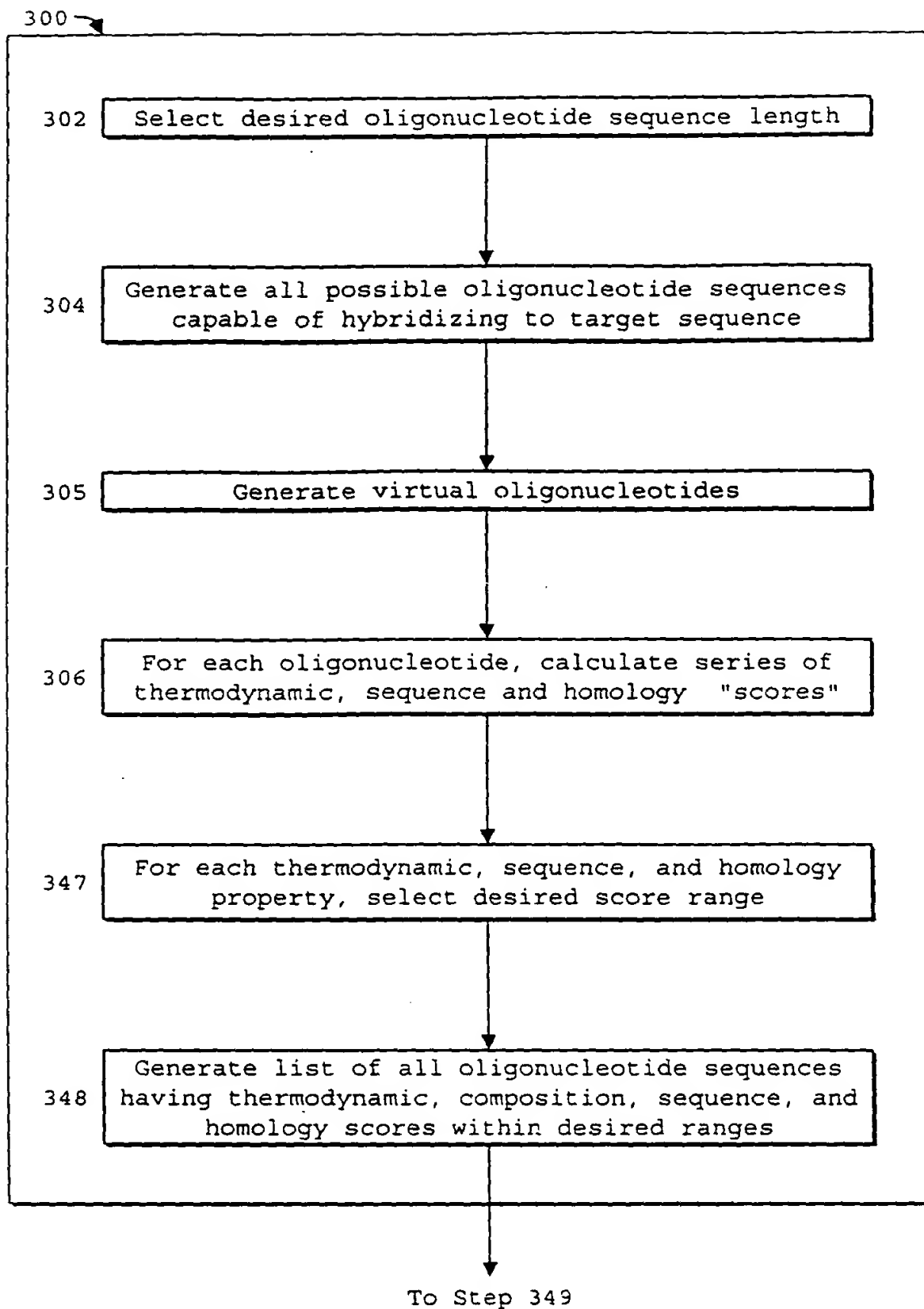


Figure 4

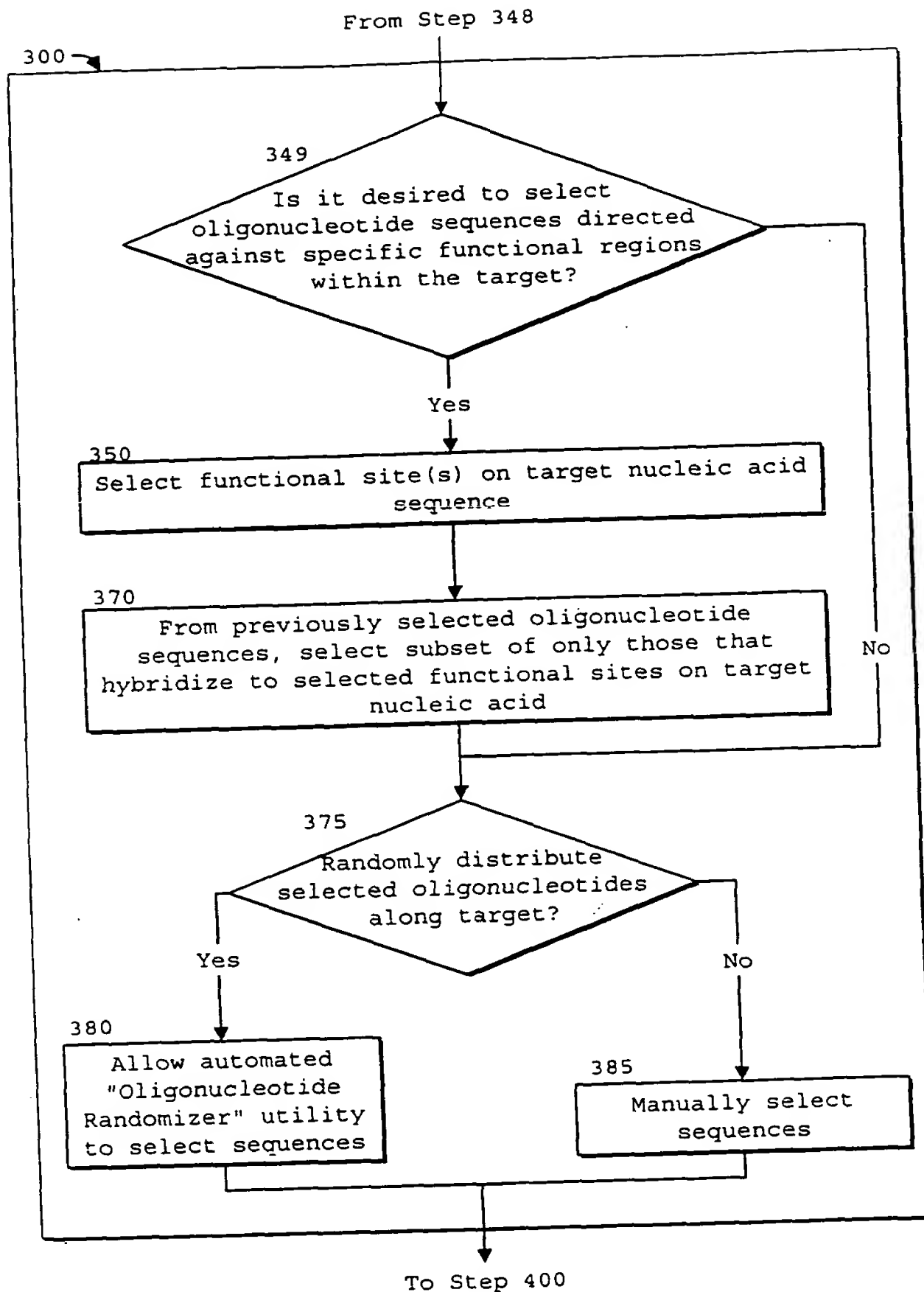
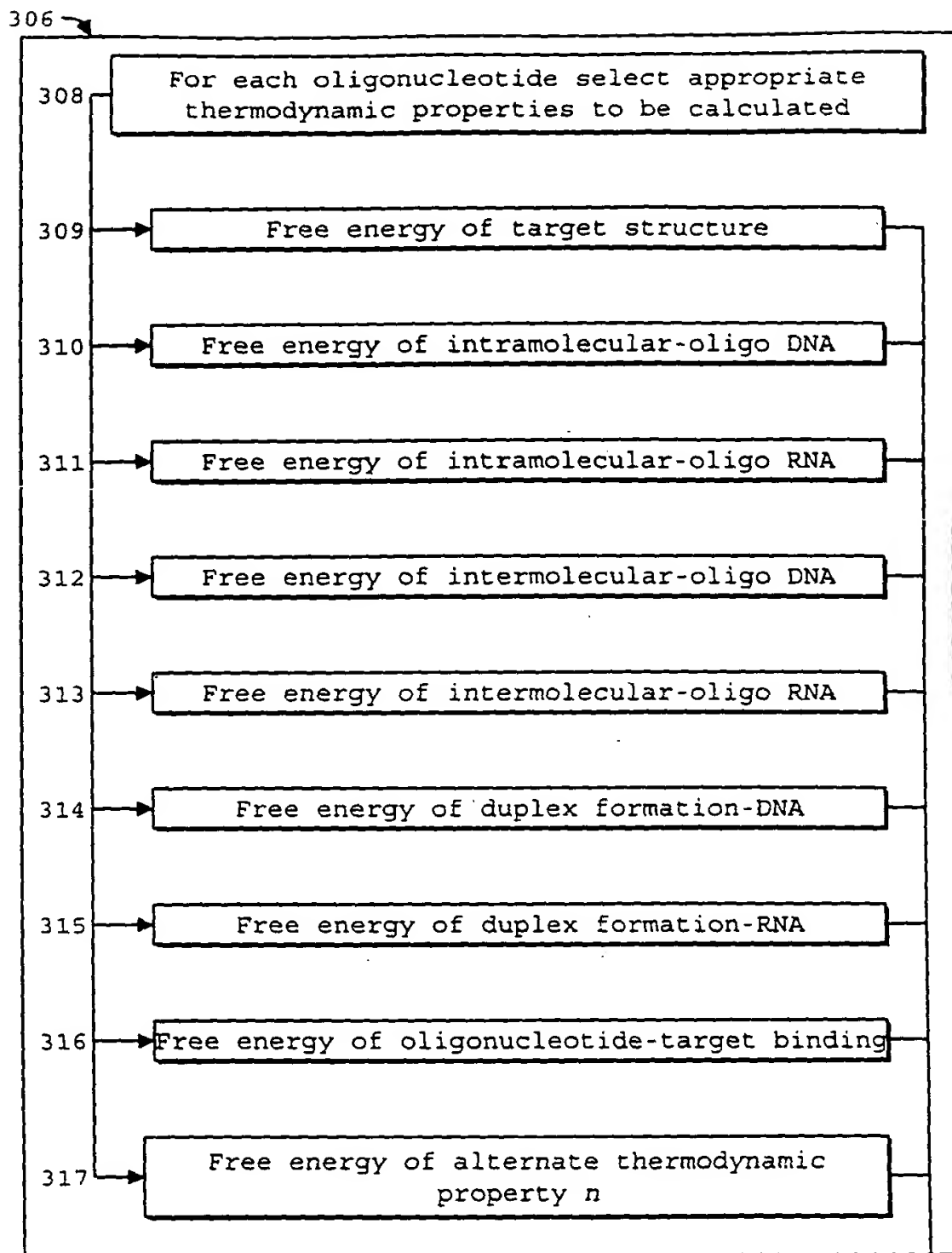


Figure 5



To connector at
step 324

Figure 6

From connector
at step 317

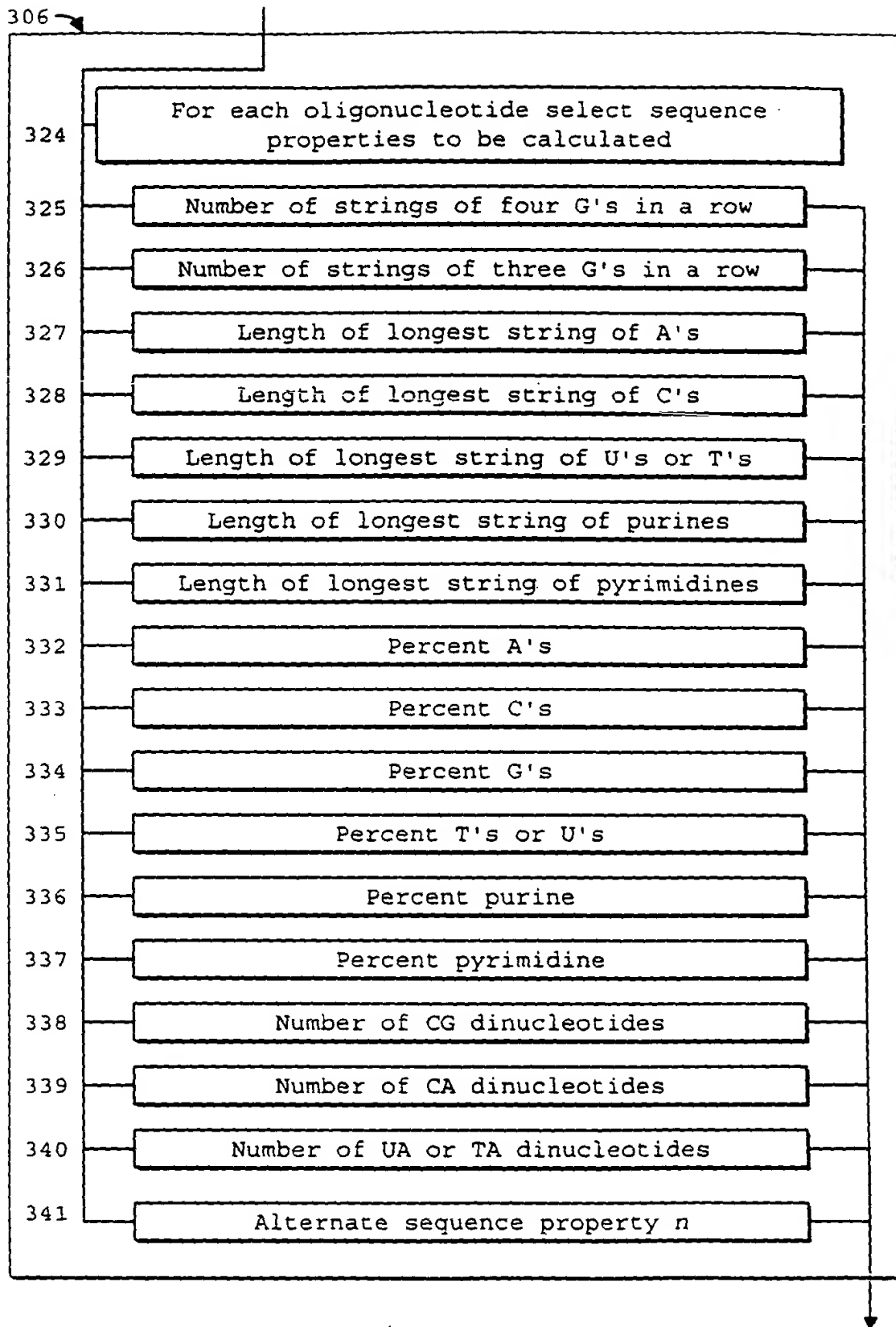


Figure 7

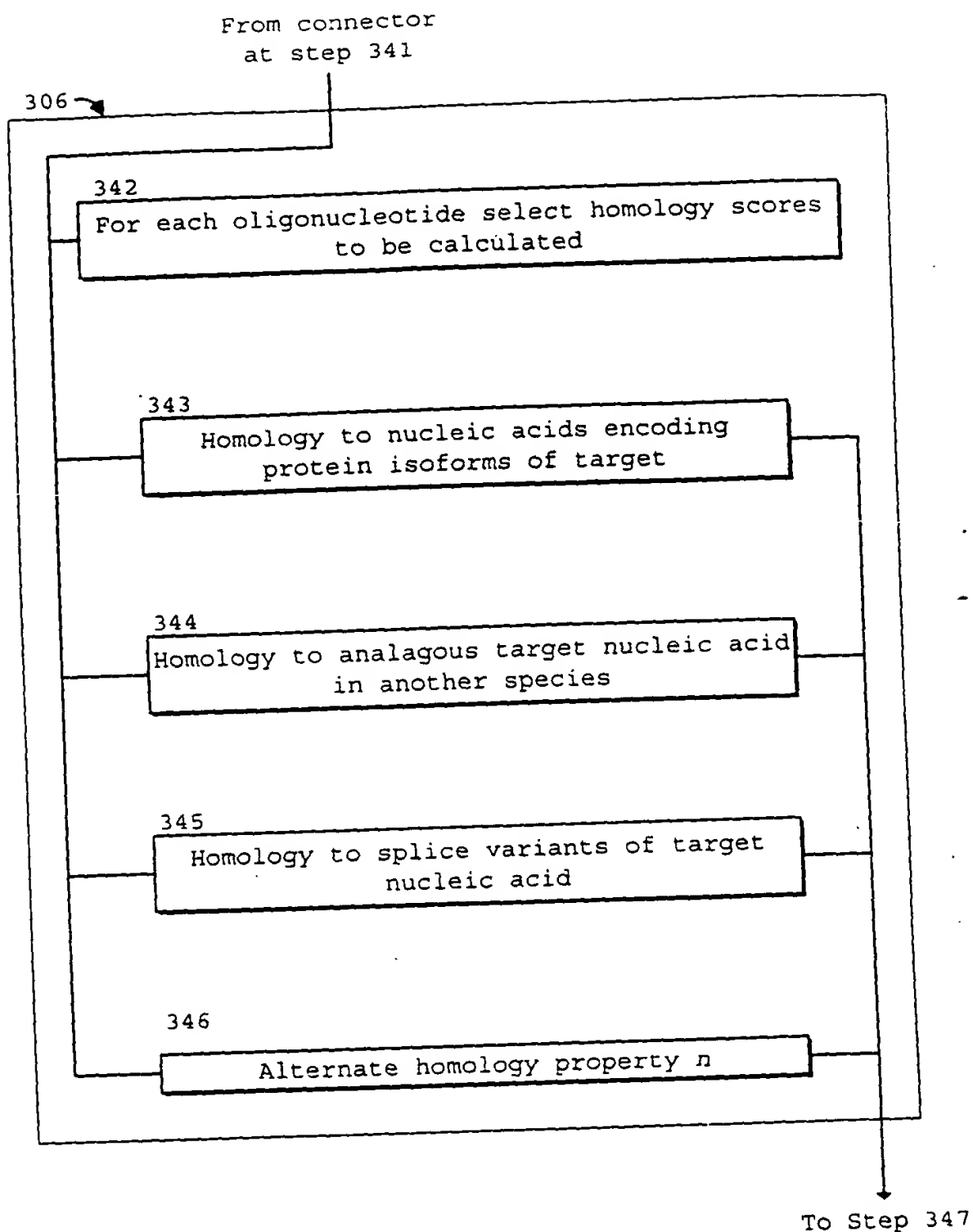
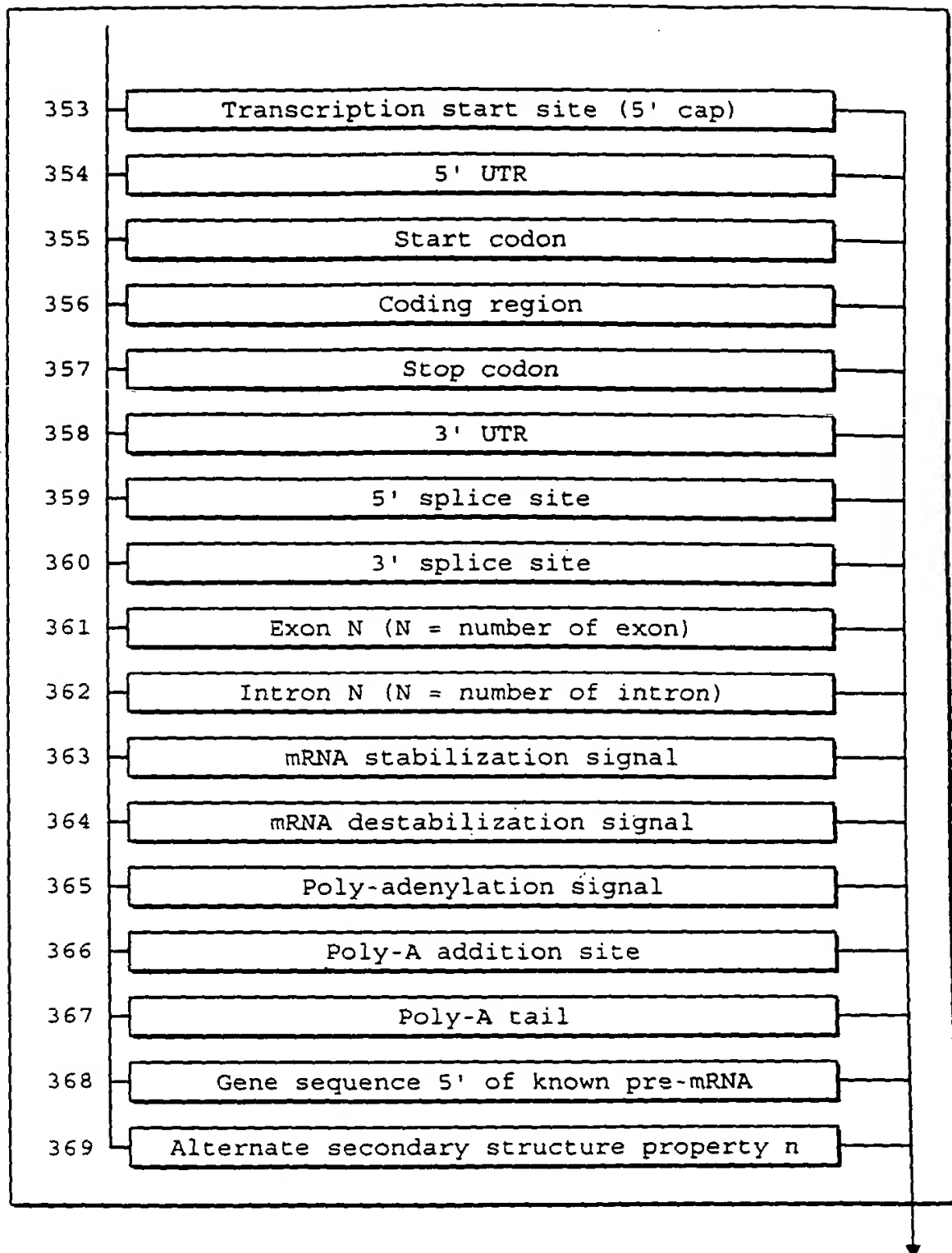


Figure 8

350



To Step 370

Figure 9

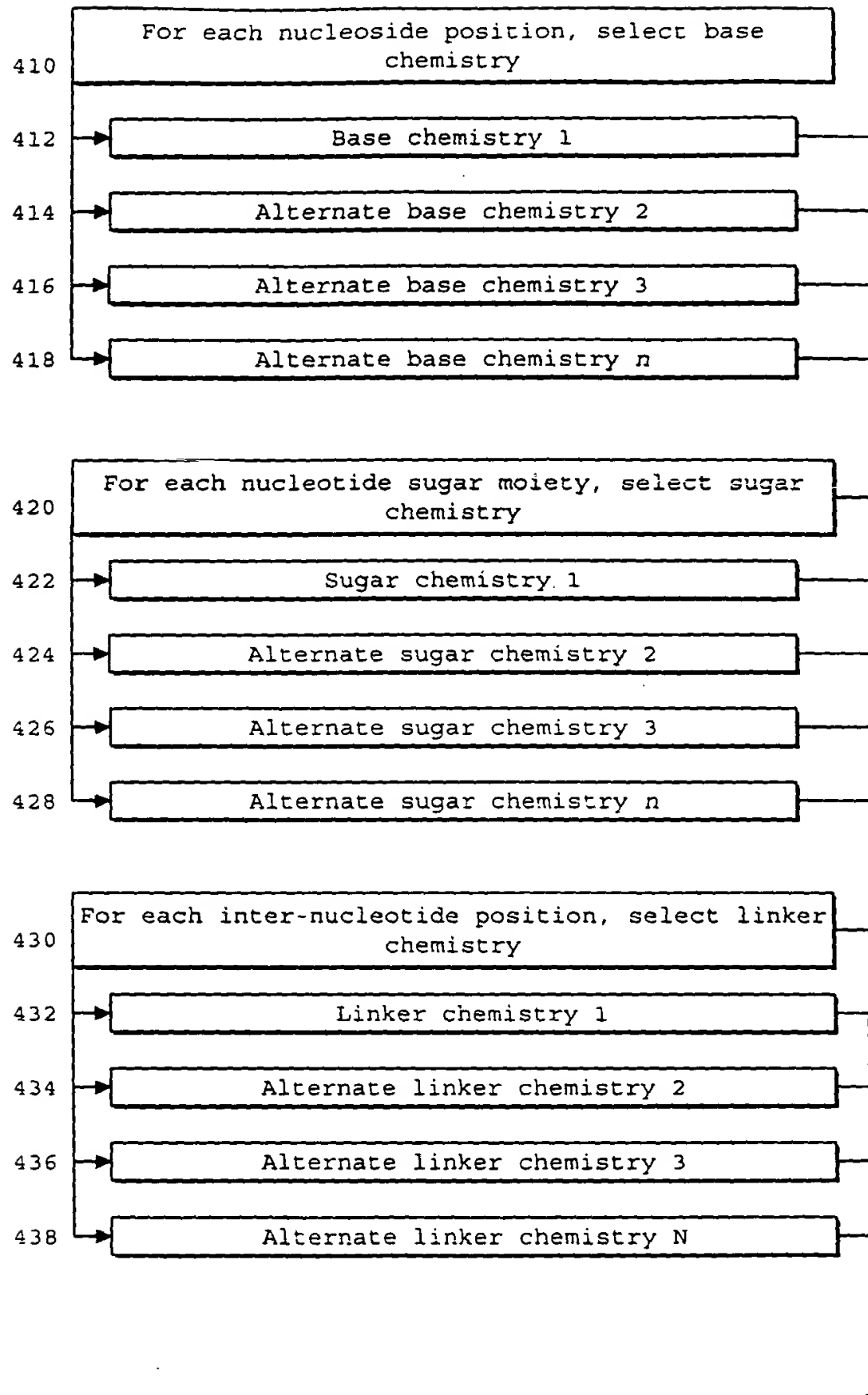


Figure 10

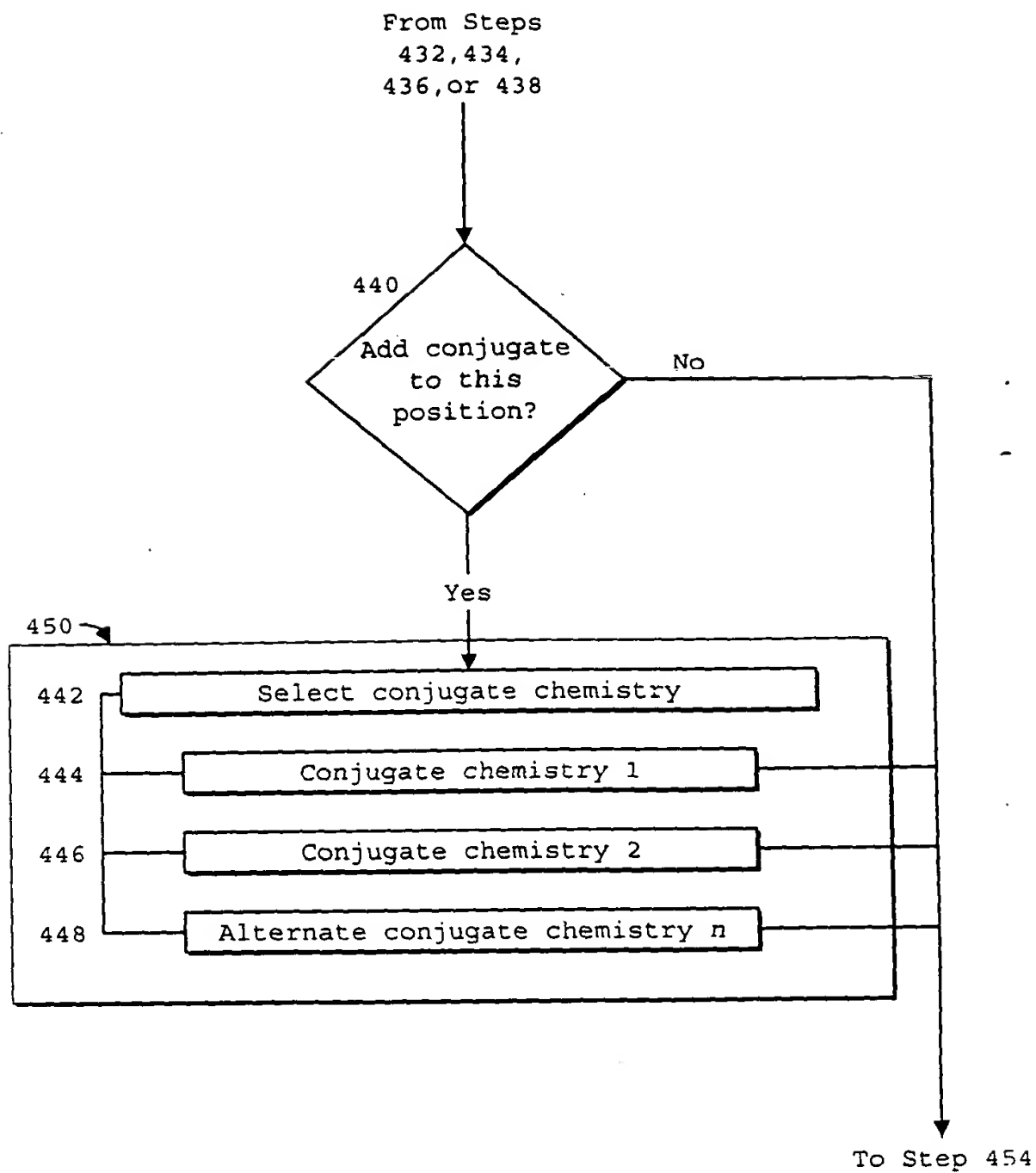


Figure 11

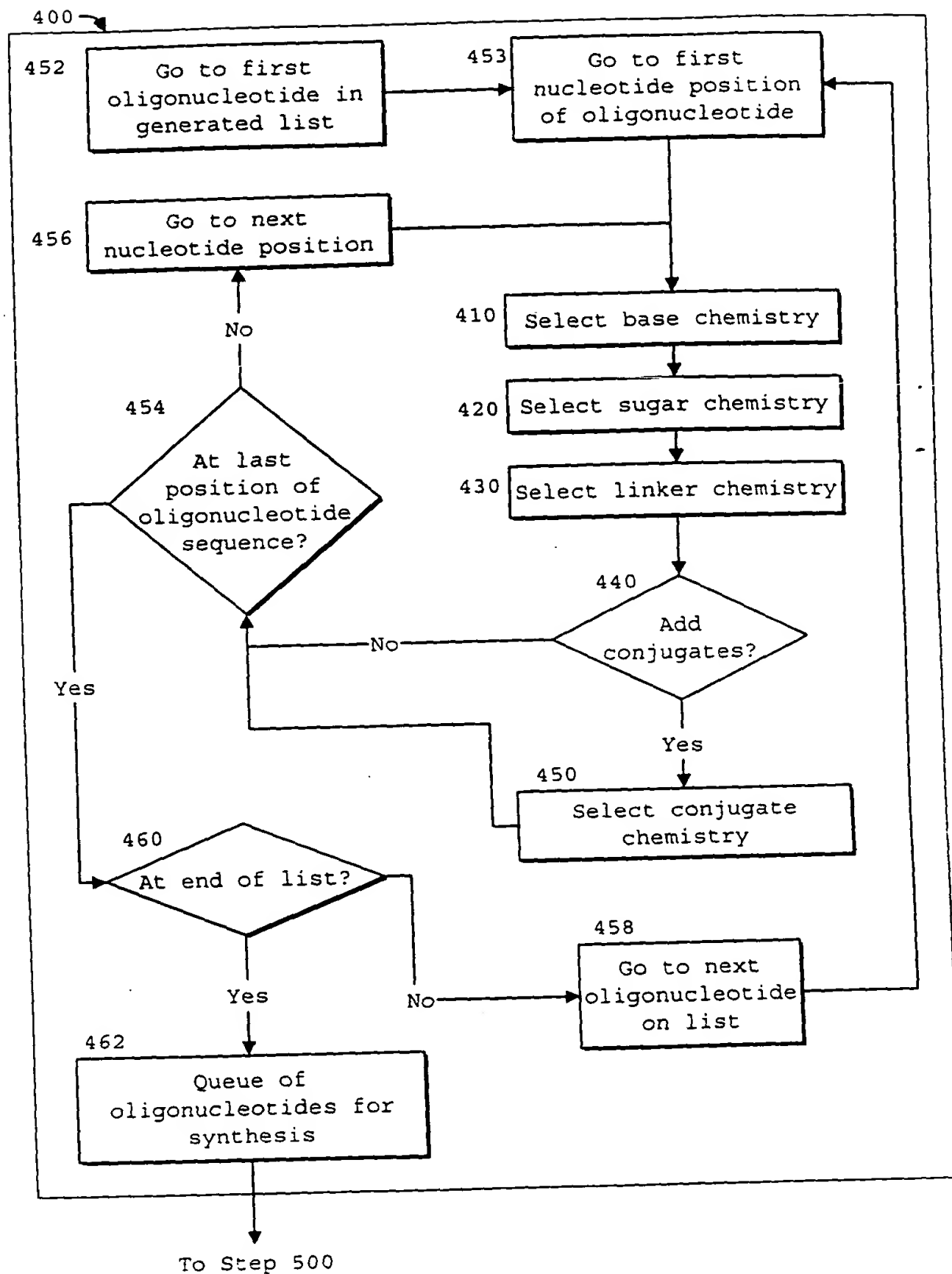


Figure 12

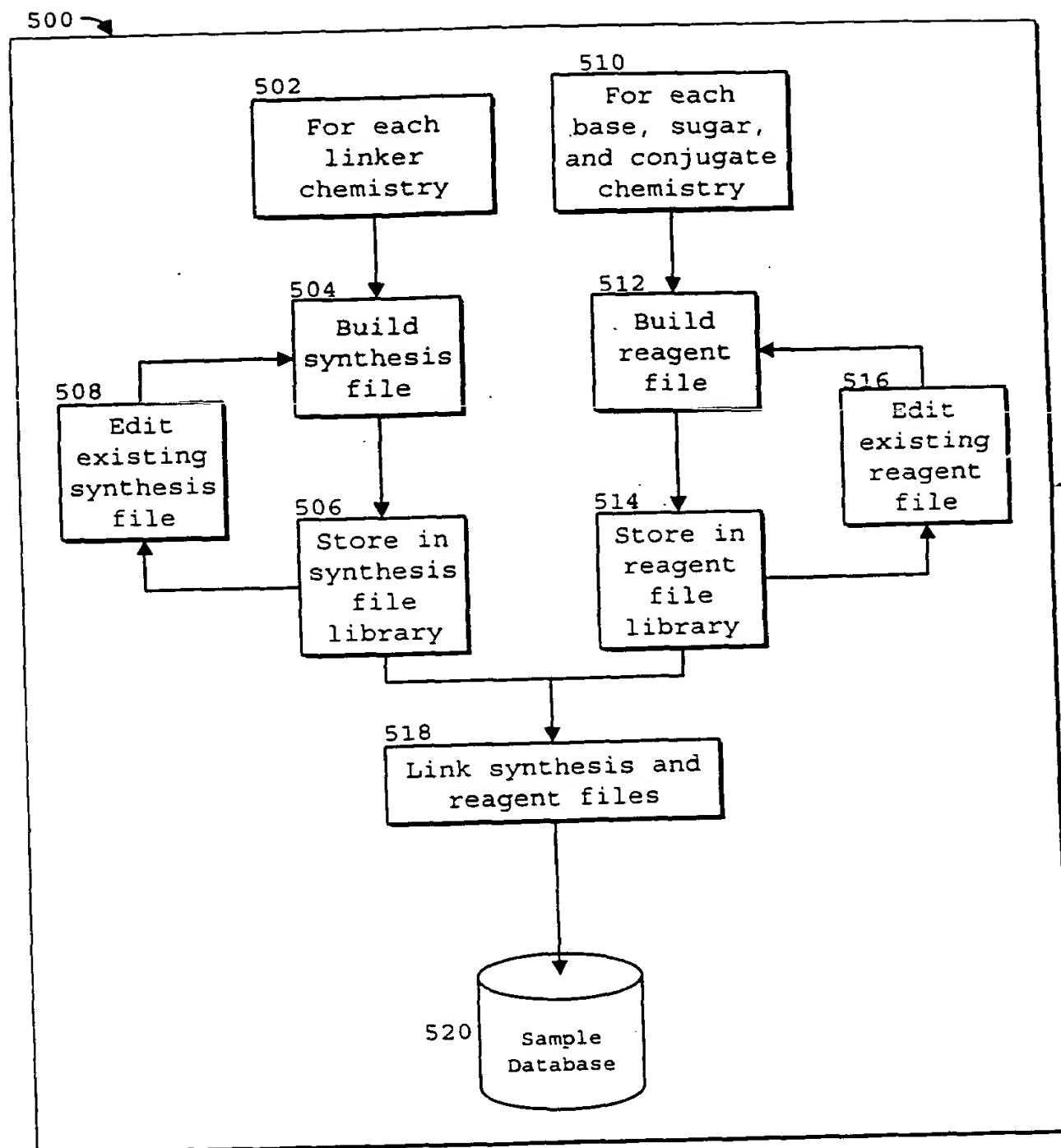


Figure 13

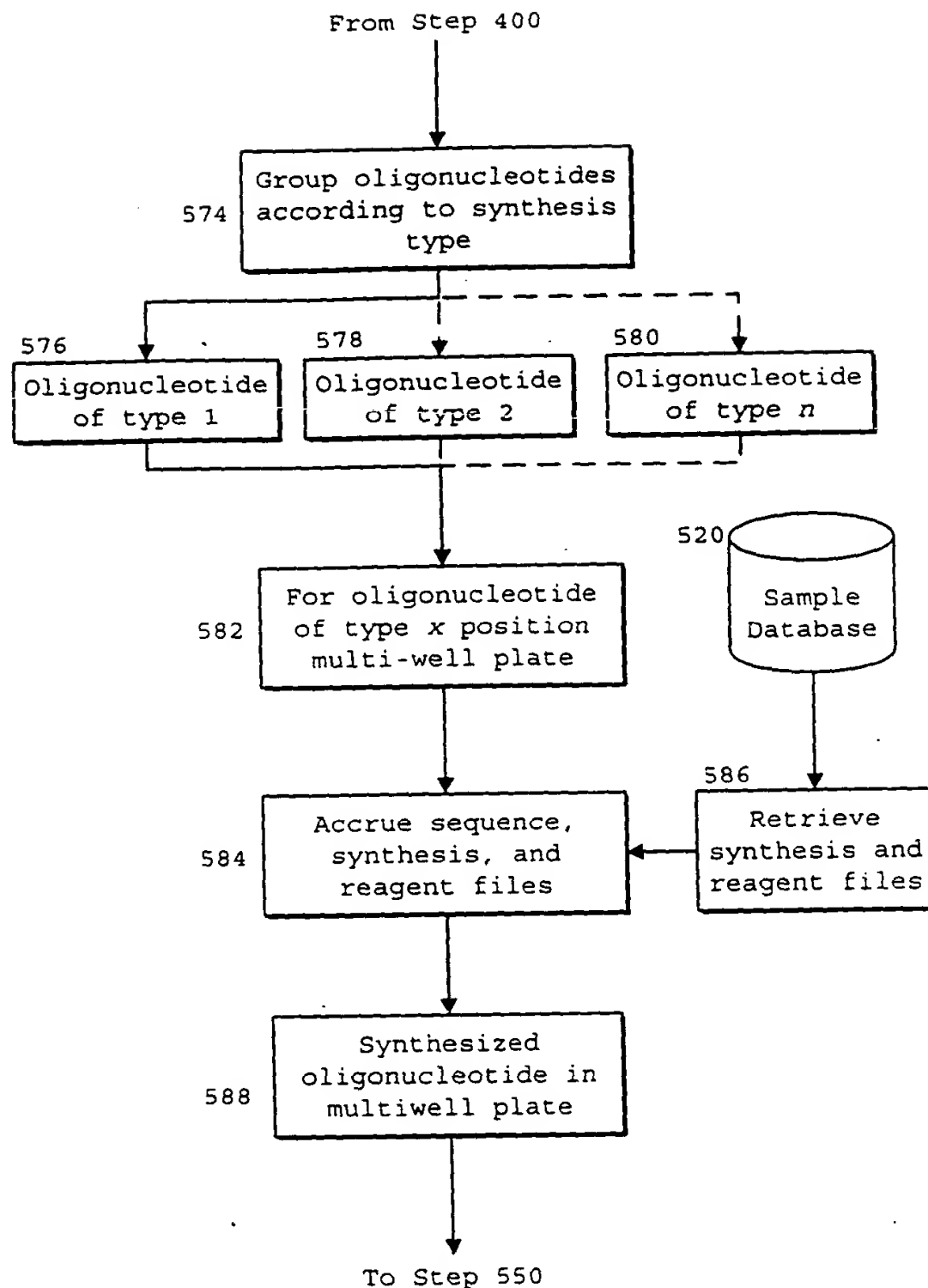


Figure 14

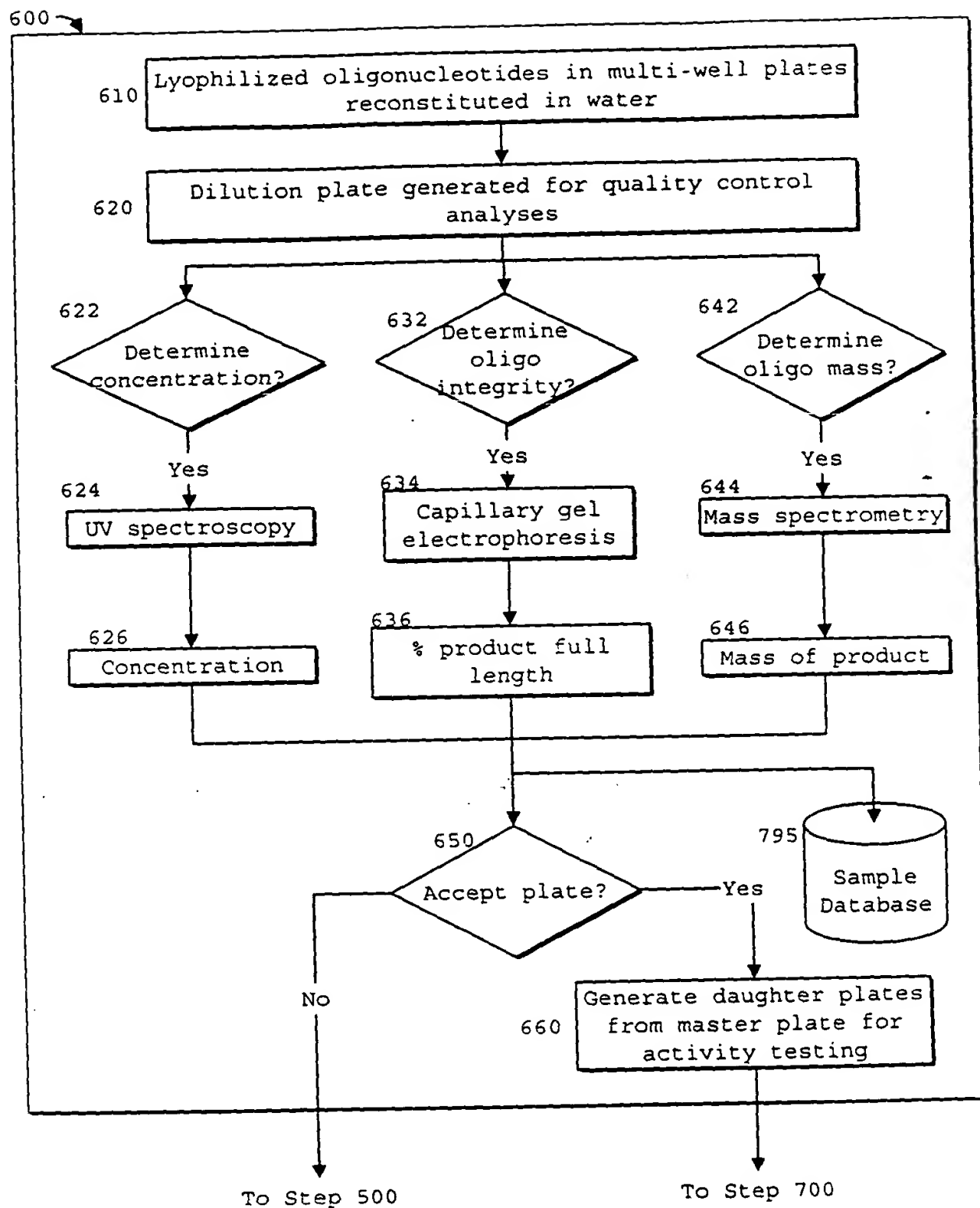


Figure 15

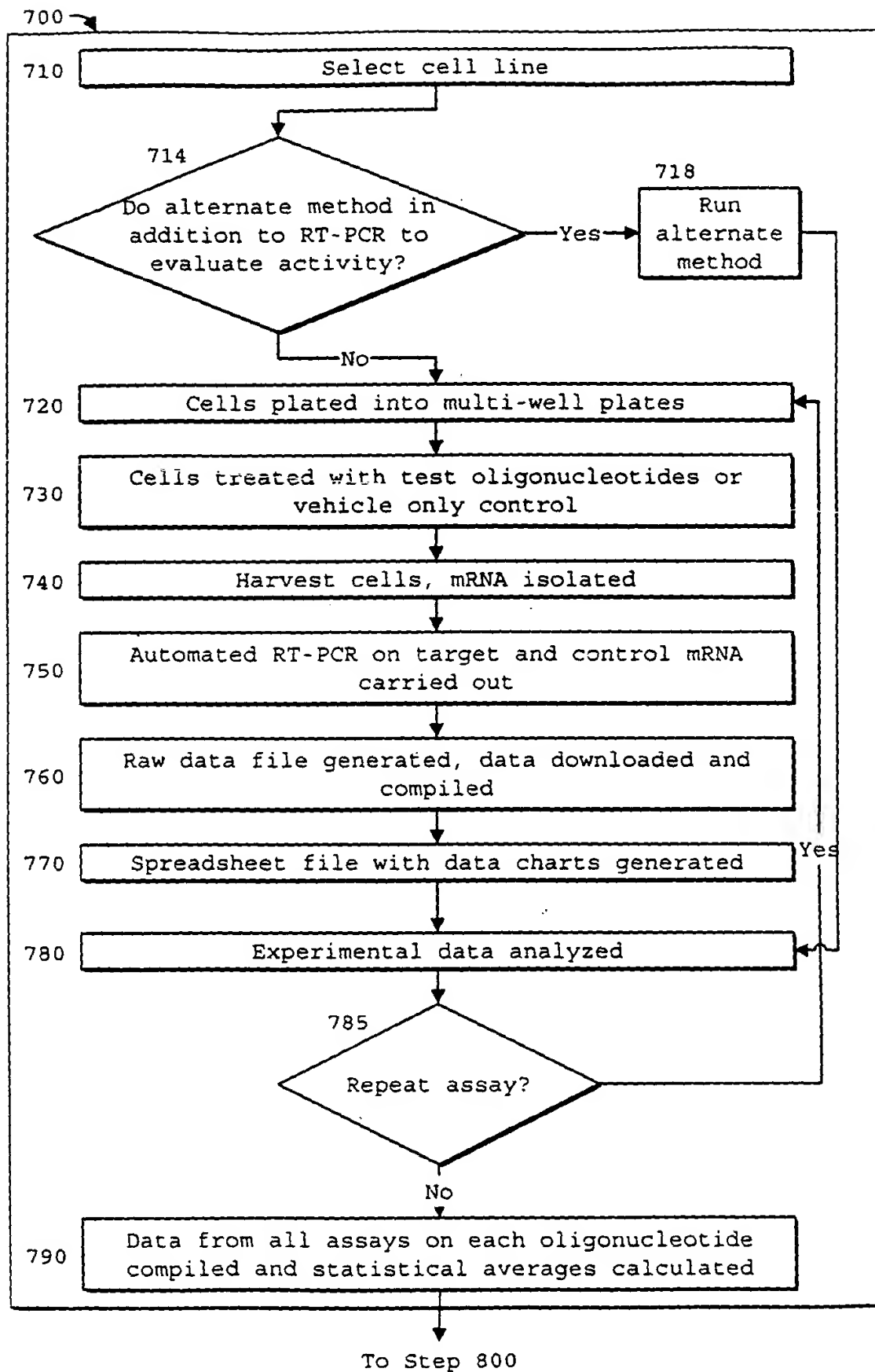


Figure 16

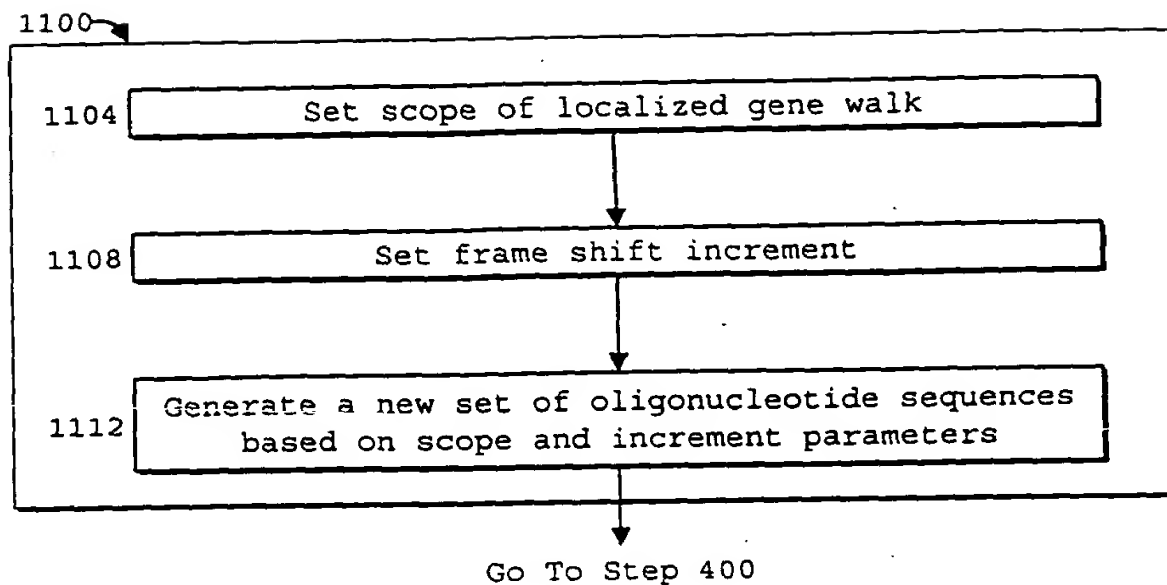


Figure 17

2002 Database Server
 2 Processors
 1GB RAM
 100GB RAID Disk
 2004 Compute Engine
 2 Processors
 0.5 GB RAM
 30GB Disk
 2006 File Server
 4 Processors
 175GB RAID Disk
 2008 Groupware Server
 4 Processors
 20GB RAID Disk
 2010 Firewall
 2012 The Internet
 2014 Automated Synthesizer

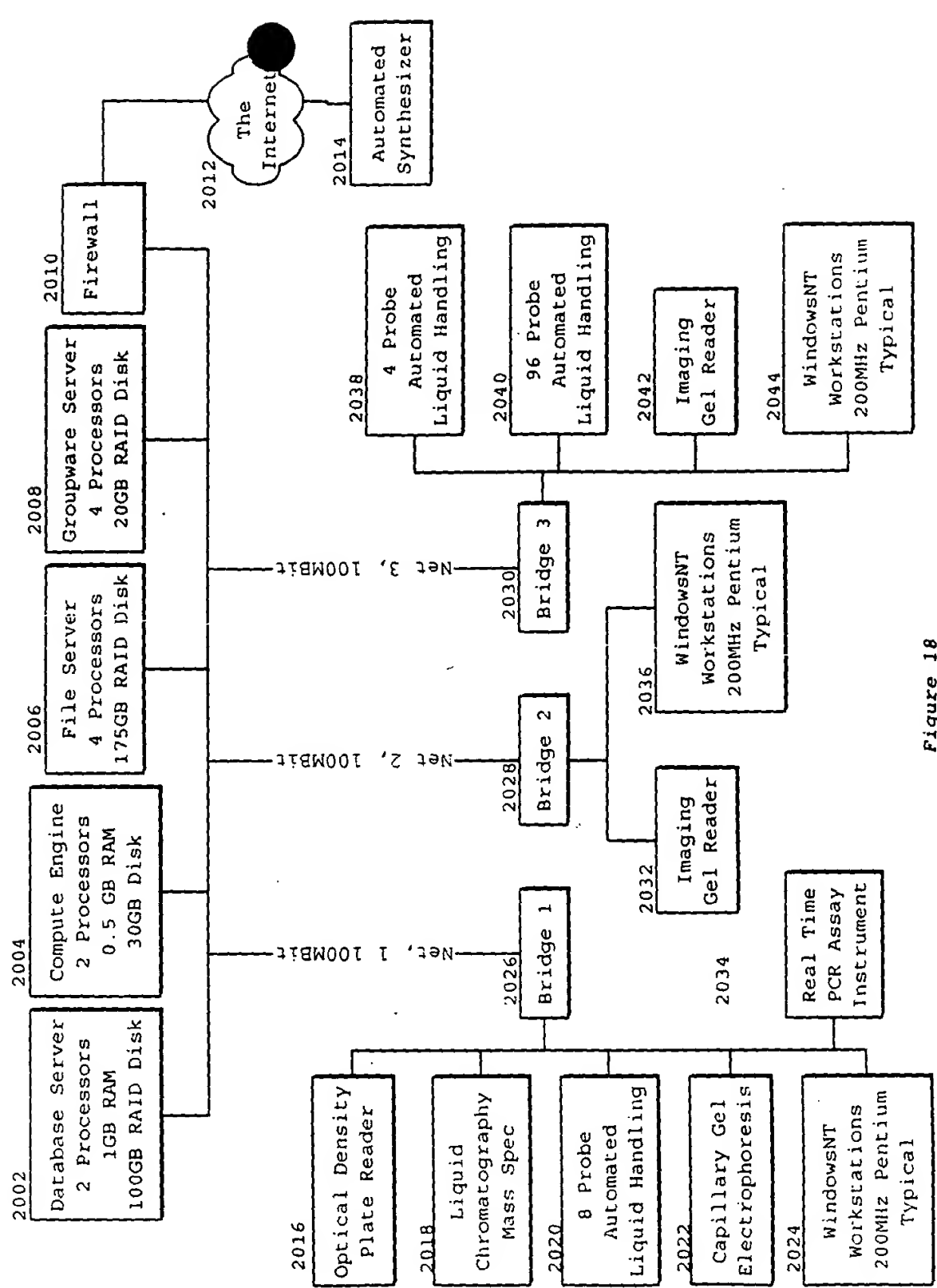


Figure 18

The diagram illustrates a database schema for a laboratory information system. The tables and their attributes are as follows:

- OrderEvent**: OrderEvent, Date/Time, Person, Status
- OligoToOrderQueue**: OligoToOrderQueue, Person, Date/Time, Oligos
- SiteToOligoQueue**: SiteToOligoQueue, Person, Date/Time, Sites
- Sample**: CompoundID, Lot, Type(Mixture?)
- Oligo**: CompoundID, Chem/Position, Structure, UnitList
- Oligo Structure**: Oligo Structure, CompoundID, MolFile
- QCD Data**: Quality, Data, Method, CompoundID
- Site**: Target, Position, Length, PickProperties
- Target Database**: Name, Synonyms, Sequence, Components
- Genome Database**: Accession
- Reference**: Journal, Date, Author, Title, Document
- Property Calc Rules**: Name, Instructions
- FoldWalk Properties**: Strategy, ValueDictionary, Target ID
- Well**: PlateBarcode, Well, Well, Concentration, Sample
- Data**: Data, Well, Type, Value, Instructions
- Activity**: Activity, Sample, Inhibition, Data
- SampleMoveHistory**: Source, Destination, Date/Time
- Document**: Author, Revision, Date, Contents

The relationships between these tables are defined by lines with crow's foot notation, showing various cardinalities and relationship types (e.g., one-to-many, many-to-many).

Figure 19

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FORT COLLINS, COLORADO 80521

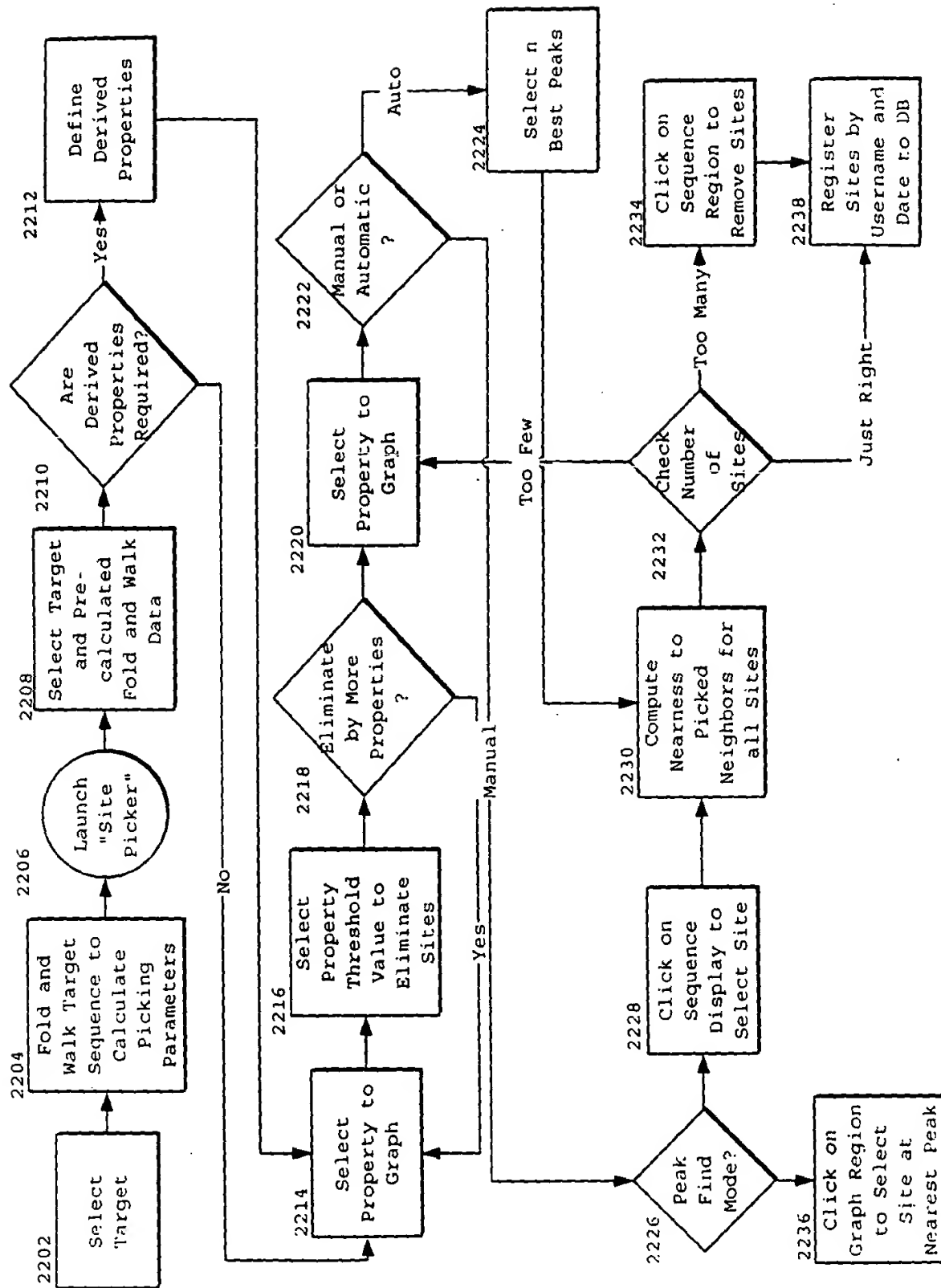


Figure 20

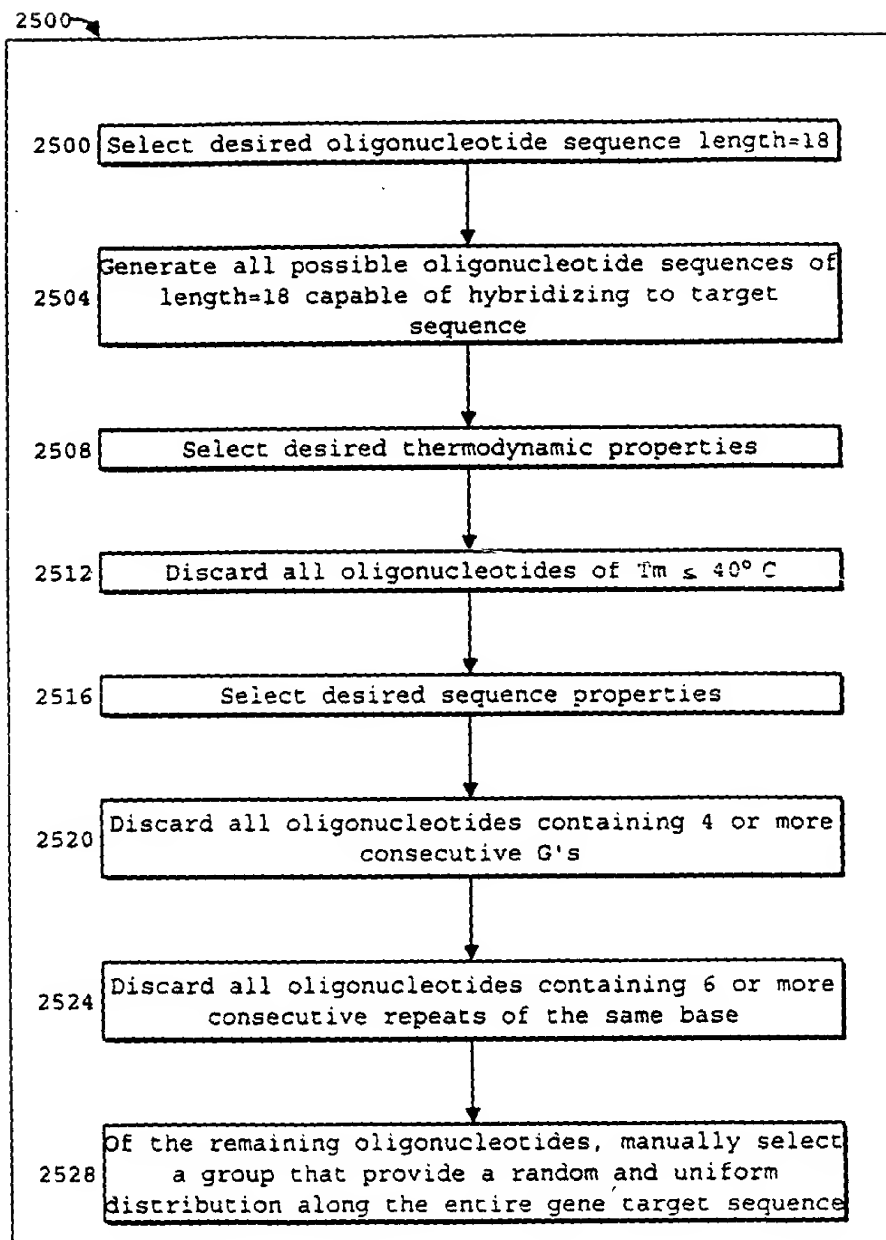


Figure 22

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

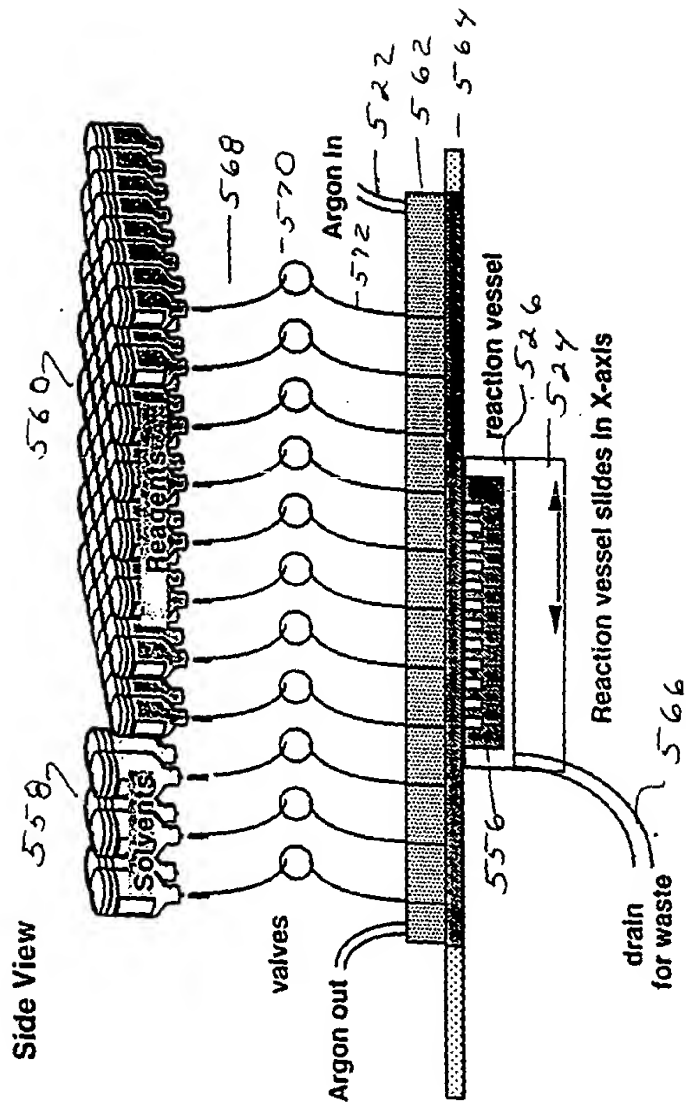


Figure 23

FIG. 24 is a top view of the nozzle assembly 100, showing the nozzle blocks 102 and the plate assembly 104. The nozzle blocks 102 are arranged in a row, and the plate assembly 104 is positioned below them. The plate assembly 104 includes a series of holes 106 and a series of slots 108. The nozzle blocks 102 are connected to the plate assembly 104 by a series of pins 110. The plate assembly 104 is supported by a base 112. The nozzle blocks 102 are arranged in a row, and the plate assembly 104 is positioned below them. The plate assembly 104 includes a series of holes 106 and a series of slots 108. The nozzle blocks 102 are connected to the plate assembly 104 by a series of pins 110. The plate assembly 104 is supported by a base 112.

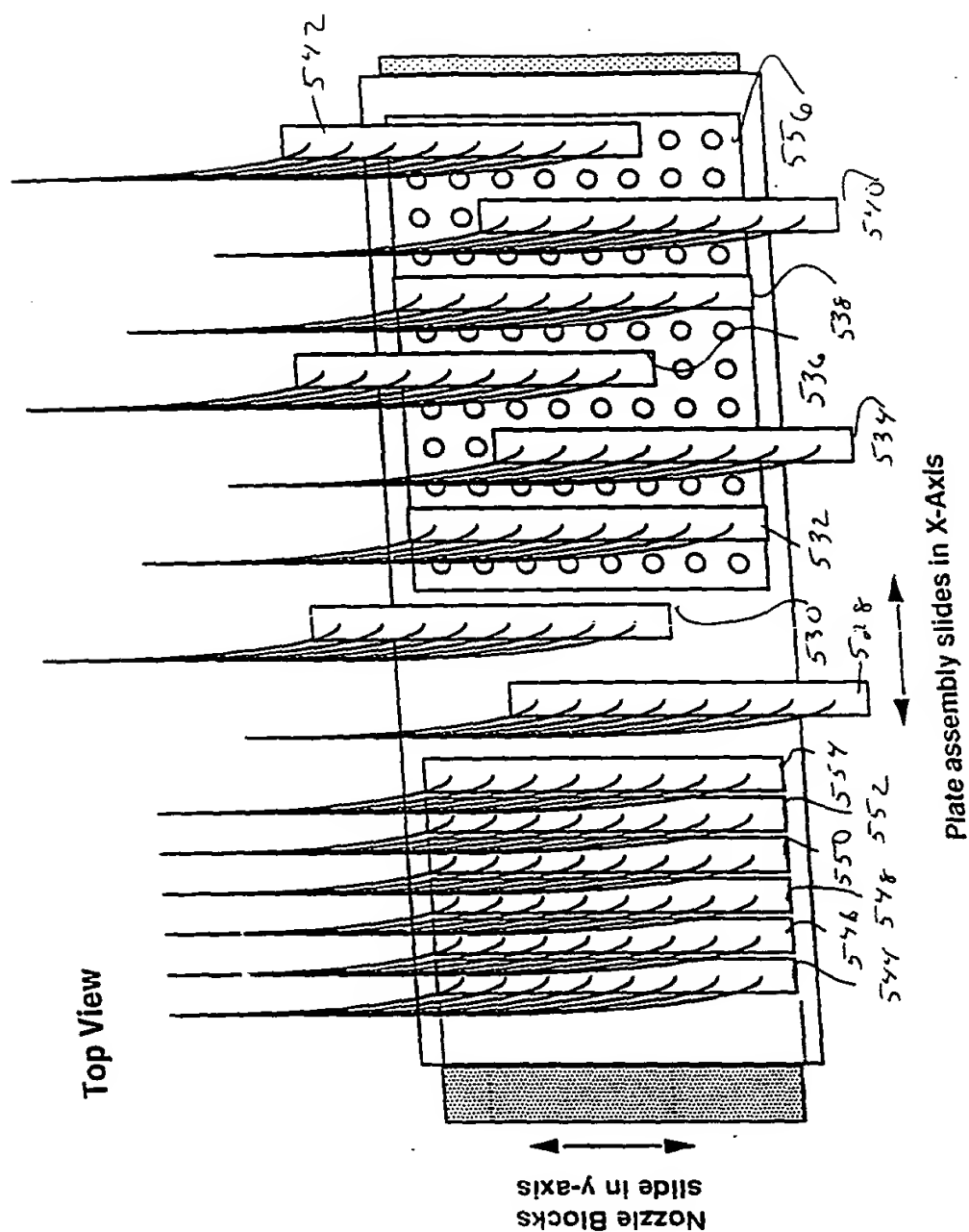


Figure 24